

LISTING OF CLAIMS

The present listing of claims replaces all prior versions.

Claim 1 (Currently Amended). Method of transporting packets between a subscriber installation specific access interface and a concentrating router of a shared network, comprising the steps of:

carrying out, at the subscriber installation specific access interface, police control operations on streams of packets transmitted to the concentrating router, within the framework of a contract between the subscriber and a manager of the shared network, the subscriber being a customer to a service provider in said shared network, and

after having carried out the control operations concerning a packet to be transmitted, transmitting said packet from the access interface to the concentrating router, each packet being transmitted with a signature based on a secret shared with the concentrating router, authenticating that the packet has been subjected to the control operations.

Claim 2 (Original). Method according to claim 1, wherein the signature consists of a code word added to the content of the packet.

Claim 3 (Previously Presented). Method according to claim 2, wherein said code word is calculated by hashing at least part of a content of the packet, involving the shared secret.

Claim 4 (Original). Method according to claim 1, wherein the signature consists of an enciphering of a content of the packet by means of a private key forming said shared secret.

Claim 5 (Previously Presented). Method according to claim 1, wherein the method further comprises a step of obtaining the signature and a step of carrying out at least some of the control operations, said steps of obtaining the signature and carrying out at least some of the control operations being carried out in a single integrated circuit.

Claim 6 (Currently Amended). Access interface for linking a subscriber installation specific access router to a concentrating router of a shared network, comprising:

police analysis means for controlling streams of packets transmitted from the subscriber installation specific access router to the concentrating router, within the framework of a contract between the subscriber and a manager of the shared network, the subscriber being a customer to a service provider in said shared network, and

signature means receiving the packets delivered by the stream control means and producing signed packets transmitted to the concentrating router, each transmitted packet being signed and each signed packet comprising a signature based on a secret shared with the concentrating router, authenticating that the packet has been subjected to the stream control

means.

Claim 7 (Original). Interface according to claim 6, wherein the signature consists of a code word added to the content of the packet.

Claim 8 (Original). Interface according to claim 7, wherein the signature means include means for calculating said code word by hashing at least part of a content of the packet, involving the shared secret.

Claim 9 (Original). Interface according to claim 6, wherein the signature consists of an enciphering of a content of the packet by means of a private key forming said shared secret.

Claim 10 (Original). Interface according to claim 6, wherein the signature means and at least part of the stream control means belong to a single integrated circuit, without physical access between the stream control means and the signature means.

Claims 11-20 Cancelled.